Arizona Department of Health Services

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SUBJECT: Information Update #16

1. This is in reference to the comments of Barry Lesnik, Office of the Solid Waste, (Information Update #11, item #2, dated May 22, 1995), regarding the acceptance limits for CCV for EPA method 8020. Our Office would like to clarify that the Arizona licensed laboratories can continue to use EPA methods 8010 and 8020 with the capillary column technique, until the EPA has withdrawn the packed column methods (which includes the methods 8010 and 8020) or until the Arizona Licensing Rules has removed them as the approved methods. The laboratories can use the acceptance criteria from the Table 3 for CCV, for the capillary column technique also. After the packed column methods are withdrawn (according to EPA it could happen within the next year), the laboratories will have to use the method 8021A in place of 8010 and 8020.

2. Technical Resources and Training is organizing an Organic Chemistry Workshop in Phoenix on November 1 - 2, 1995 at the Grace Inn, Ahwatukee. We need your assistance in order to proceed further with our planning of the workshop. Please review the **preliminary** agenda below, and if your laboratory is interested, fax us a list of the potential number of attendees from your laboratory, so that we can make all the necessary arrangements to accommodate everybody. Presenters will be from the USEPA, manufacturer's technical representatives, and the private sector.

   Day 1:

   1. METHOD FLEXIBILITY? CAN IT BE DONE?:

   Plenary session to include drinking water, wastewater and RCRA methods.

   - Can you make changes and still meet compliance criteria?
   - What changes can be made with performance based methods?
   - What specific documentation is needed when a variance from the actual method is performed?
   - What are the minimum QA/QC requirements for method performance?

   2. LET'S TALK ABOUT METHOD 502.2:

- How many control charts are needed and how are they generated?
- How are method MDLs determined? Calculated or verified by a low level standard?
- What are the QC criteria, frequency, levels and the corrective actions?

Following this session participants will be able to know the required MDLs and how they are established. An understanding of the QC criteria and the requirements including surrogates and internal standards will be provided. A discussion on the number of control charts and how they are generated will be given.

3. AUTO SAMPLER (SPARGERS & VIALS) AND CONCENTRATOR

Participants will be able to recognize the trouble shooting problems and perform the routine maintenance on auto sampler and concentrator of a Purge and Trap system.

4. KNOW YOUR DETECTORS:

a. ELCD (conductivity detector)
b. PID (photoionization detector)

- How can detector problems be recognized?
- How to provide routine maintenance?
- Which specific compounds are detected by each and why

At the end of this session the participant will know how to perform routine maintenance on each detector, trouble shoot, recognize and correct detector problems. The theory behind these detectors will be explained. This session will also include a hands on portion demonstrating the components of the detectors. A brief discussion of setting up the detectors in series for method 502.2 will be presented.

Day 2:

1. METHODS 525.1/525.2:

- What are the extraction procedures?
- How can extraction efficiencies be improved by using the proper technique?
- What are the manual and automated techniques?
- What is available on the market for extraction?
- How can you achieve consistent spike recoveries?

2. MULTI PEAK COMPOUNDS AND QUANTITATION:

- How can consistent baselines be drawn?
- How to determine when specific peaks vs. total area is used for quantitation?
- How to quantitate Toxaphene, Chlordane, Gasoline and Diesel?
- How can you recognize varying technical mixtures?
- Specific case studies - how can these discrepancies be approached?

Following this presentation participants will know how to determine proper baseline integration.

A discussion on choosing specific peaks vs. choosing a total area will be given. A break out session/group activity will include chromatograms for interpretation and discussion. An approach on handling the discrepancies between different lots of technical mixtures, when the fingerprints are different, will be discussed.

3. HOW TO GET THE MOST OUT OF YOUR CHROMATOGRAPHY SOFTWARE AND LEARN ITS VARIOUS APPLICATIONS:

- Peak resolution
- Retention time windows
- Proper baseline drawing
- What is an acceptable calibration curve?

Please call or fax your responses to Charmaine D'Souza or David Winters at the above numbers. This workshop will highlight techniques and helpful hints and will prove extremely beneficial to your laboratory. The estimated registration fees is between $150 to $200.

3. If you have any questions regarding the Updates, please call Prabha Acharya, Program manager, Technical Resources and Training, at the above numbers.